

THE NORTHERLY DISTRIBUTION OF  
*Caloptilia rufipennella* (Hübner)  
(LEPIDOPTERA: GRACILLARIIDAE) IN  
BRITAIN.

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The discovery of the sycamore-feeding Gracillariid *Caloptilia rufipennella* (Hübner) in vice-counties 19, 25, 26, 29 and 54 in East Anglia (Emmet 1971, 1972, 1975) was soon followed by the detection of a possibly independent population of the moth around the Scottish borders (Emmet 1979). In both areas it is evidently well-established and appears to be expanding its range, and the purpose of these notes is to record the present known distribution of the northern population to provide a basis for monitoring future changes.

During 1980 *rufipennella* was found to be widespread and generally abundant in the "new" VCs 82 (East Lothian) and 83 (Midlothian), and also in VCs 68, 78, 79, 81 from which (with VC 72, which I did not visit during 1980) Emmet (1979) had already recorded it. Indeed, in these vice-countries it was easily found wherever there was a good, searchable growth of *Acer pseudoplatanus*. Other new VC records were 84 (West Lothian), where it was found to be locally abundant but patchy (E. C. Pelham-Clinton), and cones were found with difficulty at single sites in 88 (Mid Perthshire: Methven Wood, NN 0526) and 99 (Dunbartonshire: Endrick Mouth N.R., Loch Lomond, NX 4388) by K. P. Bland. During a journey south from Edinburgh I searched for it in VC 67 (South Northumberland) and found a very few cones (R. Blythe, NZ 2178) after two failures in promising places further north, but I was unable to find it during single stops further south, in VCs 66 and 65. After this failure to link the two populations in Britain I paid it no more attention on the journey. It should be added that, apart from a brief and unsuccessful search in VC 85 (Fife) by E. C. Pelham-Clinton, and a more detailed but equally unsuccessful search between Moffat and the Devil's Beef Tub in the already-recorded VC 72 by K. P. Bland, it has not been sought in further vice-counties in northern Britain in 1980 as far as I am aware. Thus the above summary includes all we know of its current negative distribution.

As a result of his initial discovery in VC 29, Emmet (1971) obtained 14 larvae, none of which was parasitised. He interpreted this as suggesting that the moth was a recent arrival. During 1980 my interest in *rufipennella* chiefly concerned its hymenopterous parasites, and samples, each of about 30 penultimate and final instar larvae, were collected at Stenton (VC 82), Port Seaton (VC 82), Blackford Hill (VC 83) and Newington cemetery (VC 83) for rearing. Although about 10%

died as larvae (and a few more as pharate imagines) none appeared to be parasitised, and I similarly failed to detect parasitism in over 200 final and nearly 150 smaller cones examined at these and other sites. Concurrent collections of the cones of other species of *Caloptilia* at Blackford Hill and Stenton revealed high levels of parasitism by a range of both monophagous and more-or-less genus-specific parasites. I have little doubt that Emmet (1971) is correct that the arrival of *rufipennella* in its present areas of abundance is relatively recent, and that this may account for its apparently not being attacked by the more polyphagous of the specialist parasites of *Caloptilia*. However, I was surprised to find no parasitism at all, and it will be of interest to note how quickly, or if, a parasite complex develops. The only record of parasitism in Britain is of one cocoon from VC 25 recorded by Emmet (1972) to yield an unnamed parasite, but this could have been one of the highly polyphagous parasites of small cocoons that would be expected to include *rufipennella* as a facultative host.

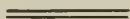
It is worth adding that predators appear to have adapted to the new resource rather better. Although cones pecked by birds were few, very many cones had one or more nymphs of the predatory cimicid bug *Anthocoris nemorum* (L.) lying in wait outside and, although a proportion may have been merely seeking shelter before moulting, these were seen to have killed many *rufipennella* larvae as they emerged from their cones.

### Acknowledgements

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### References

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PHYLLONORYCTER GENICULELLA RAG. IN CORNWALL. — With reference to the blotches found in sycamore suckers here in October 1980, which I mentioned in my article and thought might be those of *P. geniculella* (see *Ent. Rec.*, **93**: 95), this can now be confirmed as one of this species has hatched. Dr. F. H. N. SMITH, Turnstones, Perrancoombe, Parranporth, Cornwall TR6 0HX.